FIELDWORK SAFETY

INTRODUCTION

PURPOSE
Fieldwork activities such as those involving isolated or remote locations, extreme weather, hazardous terrain, harmful wildlife, or lack of ready access to emergency services can expose participants to significant risks to their health and/or safety.

The intent of this policy is to minimize health and safety risks associated with fieldwork by requiring a risk assessment in advance of fieldwork activities and by clearly defining responsibilities of those involved in planning and carrying out fieldwork activities.

DEFINITIONS
“Fieldwork” consists of activities that are
- authorized by the University;
- conducted for the purpose of study, research, teaching, or provision of clinical services;
- undertaken by faculty, staff, students, and authorized volunteers;
- conducted at a location away from Duke’s main campus, Duke’s buildings or Duke’s leased offices.

“Fieldwork” includes study, research, or teaching activities in the Duke Forest.

“Fieldwork” does not include
- supervised study or work placements at the campus, buildings, or leased offices of other institutions;
- travel for conferences, seminars, meetings, or visits to other institutions.

RESPONSIBILITIES
Departments with employees or students participating in fieldwork activities shall ensure that each group has considered the health and safety hazards associated with these activities and developed a safety plan that adequately addresses those hazards. Department heads shall approve incorporation of high-risk activities (such as SCUBA diving, use of firearms, use of heavy equipment, or piloting a boat or aircraft) into any fieldwork program.

Each lead instructor, clinical coordinator, or Principal Investigator conducting fieldwork shall
- Develop a Safety Plan for fieldwork activities that identifies likely hazards associated with the activity or physical environment (such as weather, wildlife, plants, endemic
diseases, water-borne diseases, radiation, tools/equipment/chemicals to be used, noise, heights/steep terrain, unusual methods of travel, violence, or crime). The safety plan must also include a plan for communications in case of emergency. The Safety Guidelines for Fieldwork may be consulted for guidance.

- Provide training on hazards and prevention of exposure to hazards, or ensure certification/licensing for high-risk activities such as SCUBA diving, use of firearms, use of heavy equipment, or piloting a boat or aircraft. High-risk activities require department head approval before they can be incorporated into any fieldwork program.
- Provide training on appropriate emergency response to injuries or illnesses, including location of nearest medical care facilities in case they may be needed.
- Investigate all incidents to determine their cause and, where possible, incorporate preventive measures into the safety plan.
- Notify the department of incidents. If relevant, also notify Human Resources (employee injury) and/or Corporate Risk Management.
- Designate a field team leader for each excursion who will carry out the responsibilities named below.
- Set up a system for keeping track of personnel who will be in the field so that someone on campus (in the lab or department) knows where personnel will be, how to contact them, when they expect to be back, etc.

The Field Team Leader shall
- Ensure adequate training of all team members.
- Ensure implementation of controls (e.g., PPE, medical precautions).
- Ensure that at least one team member is certified in first aid/CPR and ensure that a first aid kit is available.
- Ensure adequate provisions for food, shelter, water, communication, and transportation.
- Conduct ongoing risk assessments & report new hazards to the lead instructor or PI
- Resolve safety concerns arising in the field.
- Maintain regular contact with PI or department.
- Inform PI or department of all incidents (e.g., injuries, illnesses, or near-misses).

Employees and students participating in fieldwork activities shall
- Communicate all medical restrictions to the lead instructor or Principal Investigator and the Field Team Leader before participating in field work activities. Consult with Employee Occupational Health and Wellness or Student Health for guidance if needed, or if requested by lead instructor/PI or Field Team Leader.
- Provide planned itinerary and communicate leaving for and returning from the field as required by the PI or lead instructor.
- Review the safety plan and become familiar with the risks identified and the relevant control strategies.
- Follow guidance from the PI, lead instructor, and/or team leader for minimizing risks.
- Notify the team leader, PI, or lead instructor of newly identified hazards.
- Report all incidents to the team leader, PI, or lead instructor.
Authorized volunteers and any non-Duke participants in fieldwork activities shall have the same responsibilities as employees and students (noted above) and shall sign a Participation Agreement (provided by Corporate Risk Management).

Employee Occupational Health and Wellness (or Student Health, where applicable) will
- Provide recommended immunizations, boosters, or prophylaxis for fieldwork in areas with vaccine- or prophylaxis-preventable diseases (such as polio or malaria).
- Provide Travel Health evaluations for fieldwork participants as requested by the participant, lead instructor, PI, or Field Team leader and will provide activity restrictions or other guidance as needed.

The Occupational and Environmental Safety Office (OESO) shall provide guidance and support to employees developing safety plans for fieldwork. When required by granting or certification organizations, OESO shall review and approve fieldwork safety plans.

Corporate risk shall provide consultation as needed on insurance, participation agreements for volunteers/non-Duke participants, and high risk activities.

PROCEDURES
Departments with employees or students participating in fieldwork activities shall develop a review process to ensure that each group has met requirements of this policy and any additional departmental and/or Duke requirements. The Department will ensure that department staff/students participating in fieldwork are familiar with the departmental review process.

A Safety Plan for field work activities will be developed by the PI, lead instructor, or clinical coordinator. The Safety Guidelines for Fieldwork may be consulted for guidance. The Safety Plan will include
- The itinerary (locations, arrival and departure dates, names, addresses and phone numbers of all participants).
- A brief description of the research or teaching activity.
- Contact persons at the university and in the field.
- Emergency procedures, including identification of any team members trained in first aid and contact information for local emergency medical care if needed.
- Unusual physical demands (such as those associated with high altitude, climbing, diving, or heavy lifting).
- A risk assessment of safety and health hazards associated with the activity or physical environment (such as weather, wildlife, plants, endemic diseases, water-borne diseases, radiation, tools/equipment/chemicals to be used, noise, heights/steep terrain, unusual methods of travel, violence, or crime). The risk assessment must include strategies for controlling risk.
- Information on necessary or recommended travel immunizations or prophylaxis.
- A list of all members of the team, including a designated team leader.

Working alone in the field is strongly discouraged, especially in remote or hazardous locations. If unavoidable, the PI, lead instructor, or clinical coordinator is responsible for establishing that
the person is competent to work alone. The person working alone is responsible for team leader and employee/student roles.

TRAINING

Initial training will be provided by the instructor, Principal Investigator, or clinical coordinator responsible for the fieldwork, and will include a review of all sections of the safety plan. Refresher training will be required whenever new hazards are expected, and/or for any new fieldwork location.

For high-risk activities such as SCUBA diving, use of firearms, use of heavy equipment, or piloting a boat or aircraft, certification from a commonly recognized authority and/or a license from the applicable governing body shall be required.

REFERENCES

Fieldwork Safety Guidelines, University of Hawaii

Safety Guidelines for Field Researchers, Office of Environment, Health & Safety, University of California, Berkeley

Safety Guidelines for Fieldwork, Occupational and Environmental Safety Office, Duke University and Duke Medicine (Adapted from the Safety Guidelines for Field Researchers, Office of Environment, Health & Safety, University of California, Berkeley)